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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,811	01/22/2001	Michele Crudele	GB920000068US1	2817
75	90 03/15/2004		EXAMINER	
Manny W. Schecter IBM Corp, Intellectual Property Law Route 134/Kitchawan Road			VU, TUAN A	
			ART UNIT	PAPER NUMBER
110410 10 1/111101	hts, NY 10598		2124	1
			DATE MAILED: 03/15/2004	, 5

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
	09/766,811	CRUDELE ET AL.	
Office Action Summary	Examin r	Art Unit	
	Tuan A Vu	2124	
The MAILING DATE of this communication appeared for Reply	ppears on the cover she t v	vith the correspond nce address	••
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perio Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, however, may a ply within the statutory minimum of th d will apply and will expire SIX (6) MO ate, cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communic NBANDONED (35 U.S.C. § 133).	ation.
Status			
1) Responsive to communication(s) filed on 22	January 2001.		
2a)☐ This action is FINAL . 2b)⊠ Th	is action is non-final.		
3) Since this application is in condition for allow	· · · · · · · · · · · · · · · · · · ·		s is
closed in accordance with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.	
Disposition of Claims			
4) ☐ Claim(s) 1-5 is/are pending in the application 4a) Of the above claim(s) is/are withdr 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-5 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers			
9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) and accompany applicant may not request that any objection to the Replacement drawing sheet(s) including the corresponding to the corresponding	ccepted or b) objected to se drawing(s) be held in abeya ection is required if the drawin	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.12	• •
11)☐ The oath or declaration is objected to by the l	Examiner. Note the attache	ed Office Action or form PTO-152	2.
Priority under 35 U.S.C. § 119			
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document copies of the priority document copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of	nts have been received. nts have been received in iority documents have bee eau (PCT Rule 17.2(a)).	Application No n received in this National Stage	
Attachment(s)	_		
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/06) Paper No(s)/Mail Date 	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO-152)	

Art Unit: 2124

DETAILED ACTION

1. This action is responsive to the application filed January 22, 2001.

Claims 1-5 have been submitted for examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said client processing system" in line 3. There is insufficient antecedent basis for this limitation in the claim. This limitation is to be interpreted as being – a client processing system. Likewise, the element "said at least one modifying action" (line 6) is not provided with sufficient antecedent basis. This limitation will be interpreted as being – a action defining modifications.

Moreover, claim 1 recites the limitation "deployment tool cooperable with a software package". This limitation is indefinite because it does not point out whether a concrete cooperation is taking place or not, because 'cooperable' is not ensuring that a cooperating action is actually performed. This limitation is interpreted as if it were --- cooperating with.

Art Unit: 2124

Moreover, the limitation "a second less preferable mode" (line 24) is indefinite because of the relative state of being 'less preferable', i.e. no specification as to which reference this mode is less preferable to. This will be treated as a less preferred mode than the first method.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. The claimed invention is directed to non-statutory subject matter.

The Federal Circuit has recently applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test requires that a "useful, concrete, and tangible result" be accomplished. An "abstract idea" when practically applied is eligible for a patent. As a consequence, an invention, which is eligible for patenting under 35 U.S.C. § 101, is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The test for practical application is thus to determine whether the claimed invention produces a "useful, concrete and tangible result".

As recited, claim 1 describes a software deployment tool comprising means each having a function to achieve a result. As a whole, the claim provides elements in a useful art to accomplish the concrete result being the execution of a method in a software tool. However, there is no description in the claim that suggests evidence of a tangible element to embody the claimed software tool. The listed means to perform the steps of reading or executing as claimed do not specify or clearly suggest that they are hardware-implemented, i.e. a invention leading to a tangible result. Absent a tangible result as required by the practical application test, the claimed invention amounts to a non-statutory subject matter.

Claim Rejections - 35 USC § 103

Art Unit: 2124

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins, III et al., USPN: 5,845,090 (hereinafter Collins) in view of Schoening et al., USPN: 6,505,228 (hereinafter Schoening); and further in view of SmartUpdate, "SmartUpdate Developer's Guide", 1999, "http://developer.netscape.com/docs/manuals/communicator/jarman/install.htm" (hereinafter SmartUpdate)

As per claim 1, Collins discloses a software deployment tool (e.g. Fig. 2) cooperable with a software package including a software package file incorporating at least one action defining respective modifications to a client processing system and at least one file required to implement such action, said tool comprising:

a plurality of objects, each object corresponding to a respective type of action (e.g. *object*, *methods* - col. 2, lines 33-54; col. 6, lines 9-18);

means for reading said package file and setting the attributes of objects according to the action definition in said package file (e.g. *criteria values, criteria-dependent items* -- col. 8, lines 22-39);

means for executing a check method on one of said object actions/methods to determine if a deployment can be implemented in a first mode (e.g. Fig. 8); means responsive to check failure of any object actions, for executing said actions in a second less preferable mode that the

Art Unit: 2124

first method (e.g. UNBUILT – Fig 8; restore – col. 8, line 39 to col. 9, line 7 – Note: a restore instance is a uninstall mode).

But Collins does not explicitly specify that each object is a class corresponding to a respective type of action nor does Collins explicitly specify instantiating a class having attributes corresponding to the type of action of said package file; or means to execute class methods or check class failure. However, Collins discloses an object-method (col. 6, lines 9-18) association hence has suggested instantiating of class into objects with methods/attributes. Further, Collins suggest package having data and methods for installing computer program (col. 2, lines 24-42). The concept of using program to perform software installation and configuration was a known concept in the art of software distribution at the time the invention was made. Schoening, in a method to distribute software in a multi-processor network and execution of distributed components on a target machine analogous to Collins, also discloses creating of packages with instantiation of class methods for executing actions associated with those methods for checking device or hardware attributes during the integration of software into the target operating system or network stations (e.g. Fig. 2B,C, 2F; 3G-H). Further, analogous to Collins's method of using program for installing package components and use of object instantiation by Schoening, SmartUpdate discloses instantiation of Java class objects in the Java program/script included in the installation plug-in package with Abort, Execute, Finalize Install methods (e.g. Royal Airways Plug-in - pg. 7-10). It would have been obvious for one of ordinary skill in the art at the time the invention was made to implement the package installation as suggested by Collins so that it includes installation software with JAVA class instantiated object methods for checking methods failure during execution of package defined actions as suggested by Shoening and

Art Unit: 2124

further by SmartUpdate (see SmartUpdate: *JAR* files for cross-platform – pg. 1) because object-oriented programming language used in network application and software distribution using Java-based programs are known to have helped portability across platforms and enabling resource-restraint devices to efficiently obtain software, resolve device dependencies and activate such downloaded software (see Shoening BACKGROUND of INVENTION or SmartUpdate pg. 1).

As per claim 2, Collins discloses operation to install of remove software package (e.g. col. 2, lines 24-42; UNBUILT – Fig 8; restore – col. 8, line 39 to col. 9, line 7).

As per claim 3, Collins in combination with Shoening does not disclose that the first mode is an undoable mode but teaches the second mode is a basic mode (see claim 2 – Note: backup and uninstall of software are the 2 basic modes of action for installing new software or upgrading software). Official notice is taken that using of non-erasable medium to store software operating small device with restraint resources (i.e. having limited or fixed amount of memory), such as firmware stored in small watch, PDA, cell phone, modem, was a known concept at the time the invention was made. In view of such concept in conjunction with the use of Java code to execute the installation and integration of cross-platform package objects into the device as suggested by Shoening or SmartUpdate, the suggestion that a form of installation not allowing any un-installation option is suggested. Hence, if the device for which the downloaded package is to be integrated happens to be a device of limited resources as mentioned above, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Collins' method (combined with Shoening/SmartUpdate) so that one installation mode

is a non-uninstall mode, i.e. undoable as claimed, because of the same reasons as recognized from the above notice.

As per claim 4, Collins discloses that the first mode is basic and the second mode is transitional (see claim 1- Note: the fact that uninstall (second mode) would be transitional is because it is temporary to a more stabilized situation wherein the software is re-installed (1st mode) after all conflicts have been resolved).

As per claim 5, this is a medium claim of claim 1, hence is rejected with the corresponding rejection as set forth therein.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat No. 6,425,005 to Dugan et al., disclosing distribution of SLP for instantiating node execution.

U.S. Pat No. 6,014,666 to Helland et al., disclosing roles-based instantiation of package objects in client/server framework.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (703)305-7207. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703)305-9662.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

Art Unit: 2124

(703) 872-9306 (for formal communications intended for entry)

or: (703) 746-8734 (for informal or draft communications, please consult Examiner before using this number)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., 22202. 4th Floor(Receptionist).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VAT March 5, 2004

Todd Ingberg
Primary Examiner
Group 2100